

SITE INFORMATION

Report Type: Work Plan

| | | | | | |
|------------------------------------|---|---------|--------|--------------|--|
| General Site Information: | | | | | |
| Site: | Foster Eddy #9 (flow line) | | | | |
| Company: | COG Operating LLC | | | | |
| Section, Township and Range | Unit J | Sec. 17 | T-17-S | R-31-E | |
| Lease Number: | API-30-015-26273 | | | | |
| County: | Eddy County | | | | |
| GPS: | 32.83314° N | | | 103.88694° W | |
| Surface Owner: | Federal | | | | |
| Mineral Owner: | | | | | |
| Directions: | Intersection of NM 82 and 529 travel west on 82 0.9 miles, turn right 0.9 miles, left 0.3 miles, right 0.1 miles to location on left. | | | | |
| | | | | | |
| | | | | | |

| | | |
|---------------------------------|--|---|
| Release Data: | | <div style="border: 2px solid black; padding: 5px; width: fit-content; margin: auto;"> <p>RECEIVED</p> <p>MAY 21 2012</p> <p>NMOC D ARTESIA</p> </div> |
| Date Released: | 1/13/2012 | |
| Type Release: | Produced Fluids - Skim oil | |
| Source of Contamination: | 3" polyline ruptured | |
| Fluid Released: | 15 bbls produced water and 1 bbls of oil | |
| Fluids Recovered: | none | |

| | | | |
|--------------------------------|-----------------------------|--|----------------------------|
| Official Communication: | | | |
| Name: | Pat Ellis | | Ike Tavaréz |
| Company: | COG Operating, LLC | | Tetra Tech |
| Address: | 550 W. Texas Ave. Ste. 1300 | | 1910 N. Big Spring |
| P.O. Box | | | |
| City: | Midland Texas, 79701 | | Midland, Texas |
| Phone number: | (432) 686-3023 | | (432) 682-4559 |
| Fax: | (432) 684-7137 | | |
| Email: | pellis@conchoresources.com | | ike.tavaréz@tetrattech.com |

| | | |
|---|----------------------|------------------|
| Ranking Criteria | | |
| Depth to Groundwater: | Ranking Score | Site Data |
| <50 ft | 20 | |
| 50-99 ft | 10 | |
| >100 ft. | 0 | 0 |
| WellHead Protection: | Ranking Score | Site Data |
| Water Source <1,000 ft., Private <200 ft. | 20 | |
| Water Source >1,000 ft., Private >200 ft. | 0 | 0 |
| Surface Body of Water: | Ranking Score | Site Data |
| <200 ft. | 20 | |
| 200 ft - 1,000 ft. | 10 | |
| >1,000 ft. | 0 | 0 |
| Total Ranking Score: | | 0 |

| Acceptable Soil RRAL (mg/kg) | | |
|------------------------------|-------------------|------------|
| Benzene | Total BTEX | TPH |
| 10 | 50 | 5,000 |



TETRA TECH

March 27, 2012

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
1301 West Grand Avenue
Artesia, New Mexico 88210

Re: Assessment and Work Plan for the COG Operating LLC., Foster Eddy #9 (Flow line), Section 17, Township 17 South, Range 31 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the Foster Eddy #9 Flow line, Section 17, Township 17 South, Range 31 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.83314°, W 103.88694°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico Oil Conservation Division (NMOCD) Form C-141 Initial Report, the leak was discovered on January 13, 2012 and released approximately fifteen (15) barrels (bbls) of produced water and one (1) bbls of oil due to a 3" polyline rupture. To alleviate the problem, COG repaired the line and returned it to service.

The spill initiated from the polyline located on high ground near a native dry arroyo/wash. The spill migrated into the bottom of the dry arroyo/wash area and flowed in two directions. The impact of the spill measured an approximate length of 130', with a width of 3' to 5' in both spill paths. The spill areas are shown on Figures 3. The initial Form C-141 is enclosed in Appendix A.

Groundwater

No water wells were reported in Section 17. One well is listed in Section 34 with a reported depth to groundwater of 271' bgs. According to the NMOCD groundwater map, the average depth to groundwater is approximately 325' below surface. The groundwater data is shown in Appendix B.

Tetra Tech

1910 North Big Spring, Midland, TX 79705

Tel 432.682.4559

Fax 432.682.3946

www.tetrattech.com



Regulatory

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

Soil Assessment

On February 8, 2012, Tetra Tech personnel inspected and sampled the spill area. A total of ten (10) auger holes (AH-1 through AH-10) were installed using a stainless steel hand auger to assess the impacted area. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

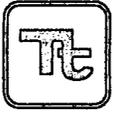
Analytical Results

Referring to Table 1, all of the auger holes were below the RRAL for TPH and BTEX, with the exception AH-10. Auger hole (AH-10) showed TPH concentrations of 12,800 mg/kg at 0-1' which declined below the RRAL at 1-1.5' below surface to 4,280 mg/kg. In addition, the benzene and total BTEX concentrations exceeded the RRAL in the surface soils and declined below the RRAL at 2.0' and 3.0', respectively.

A shallow chloride impact was detected at the site with the majority of the auger hole locations vertically defined. Auger holes (AH-1 through AH-6) detected elevated chlorides at 0-1', which significantly declined with depth at 1-1.5' below surface. Auger holes (AH-7 and AH-8) were not vertically defined and showed bottom hole samples of 3,460 mg/kg at 2-2.5' and 11,600 mg/kg at 1-1.5', respectively. AH-9 and AH-10 showed a deeper impact to the soil but were vertically defined.

Work Plan

COG proposes to remove the impacted material as highlighted (green) in Table 1 and shown on Figure 4. The areas of AH-1 through AH-6 will be excavated to an approximate depth of 1.0' below surface to remove the elevated chloride concentrations. The area of AH-10 will be excavated to an approximate depth of 2.0' below surface to remove the soils exceeding the RRAL for BTEX and TPH.



TETRA TECH

If accessible, the areas of AH-7, AH-8 and AH-9 will be excavated to an approximate depth 3.0' below surface. In addition, backhoe trenches will be installed in the areas of AH-7 and AH-8 to attempt to vertically define chloride impact, if accessible. Once completed, the areas will be backfilled or capped with clay material. Due to depth to groundwater and limited extents, the remaining impact does not appear to an environmental concern.

Once excavated to the appropriate depths, the excavated material will be transported to proper disposal. Due to the limited access issues within the arroyo/wash area, the proposed excavation depths may not be reached due to wall cave ins and safety concerns for onsite personnel. As such, Tetra Tech will excavate the soils to the maximum extent practicable. If deeper impact is encountered, the impacted area will be capped with clay.

Upon completion, a final report will be submitted to the NMOCD and BLM. If you have any questions or comments concerning the assessment or the proposed remediation activities for this site, please call me at (432) 682-4559.

Respectfully submitted,
TETRA TECH

Ike Tavarez
Senior Project Manager

cc: Pat Ellis – COG
cc: Terry Gregston - BLM

Figures

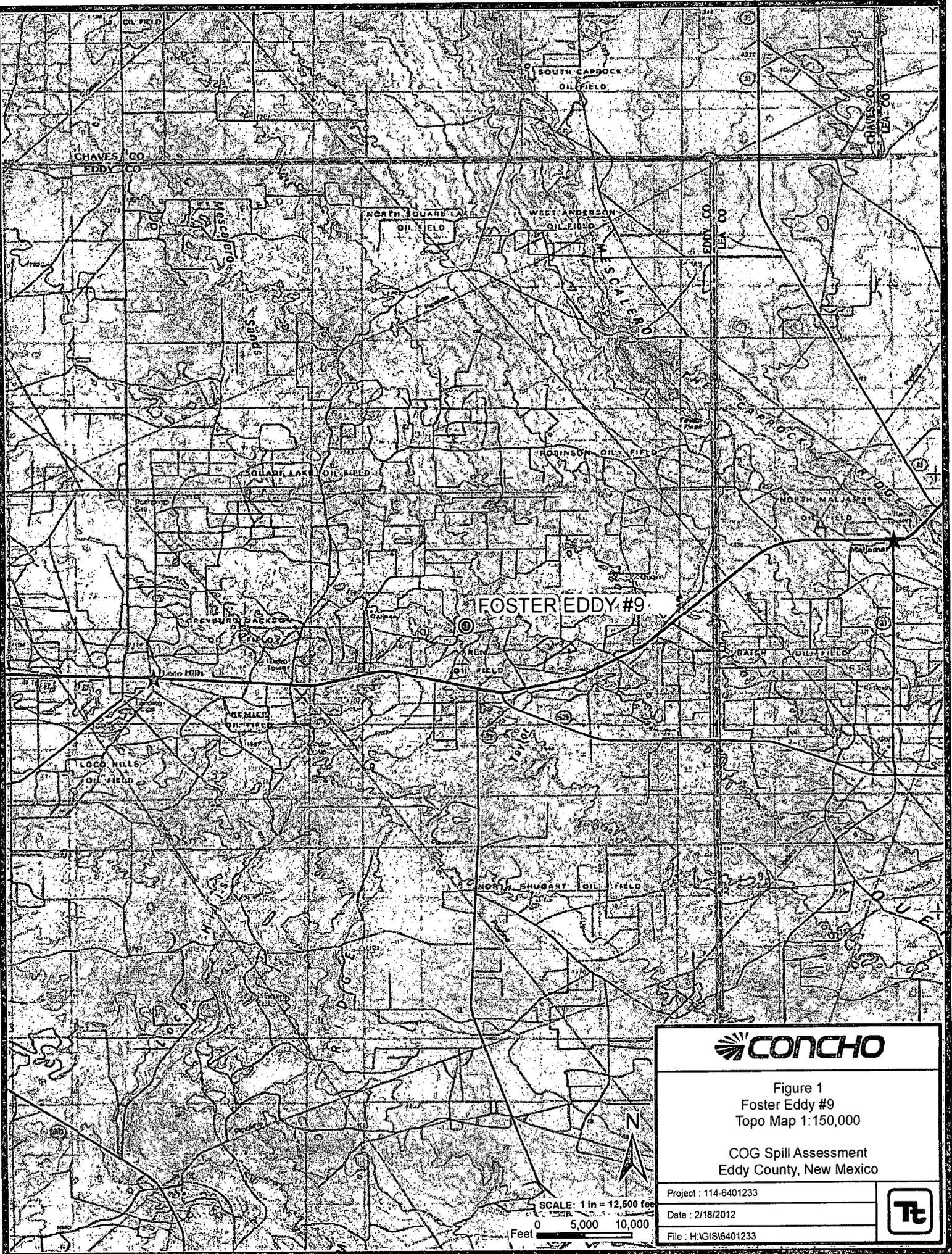


Figure 1
Foster Eddy #9
Topo Map 1:150,000

COG Spill Assessment
Eddy County, New Mexico

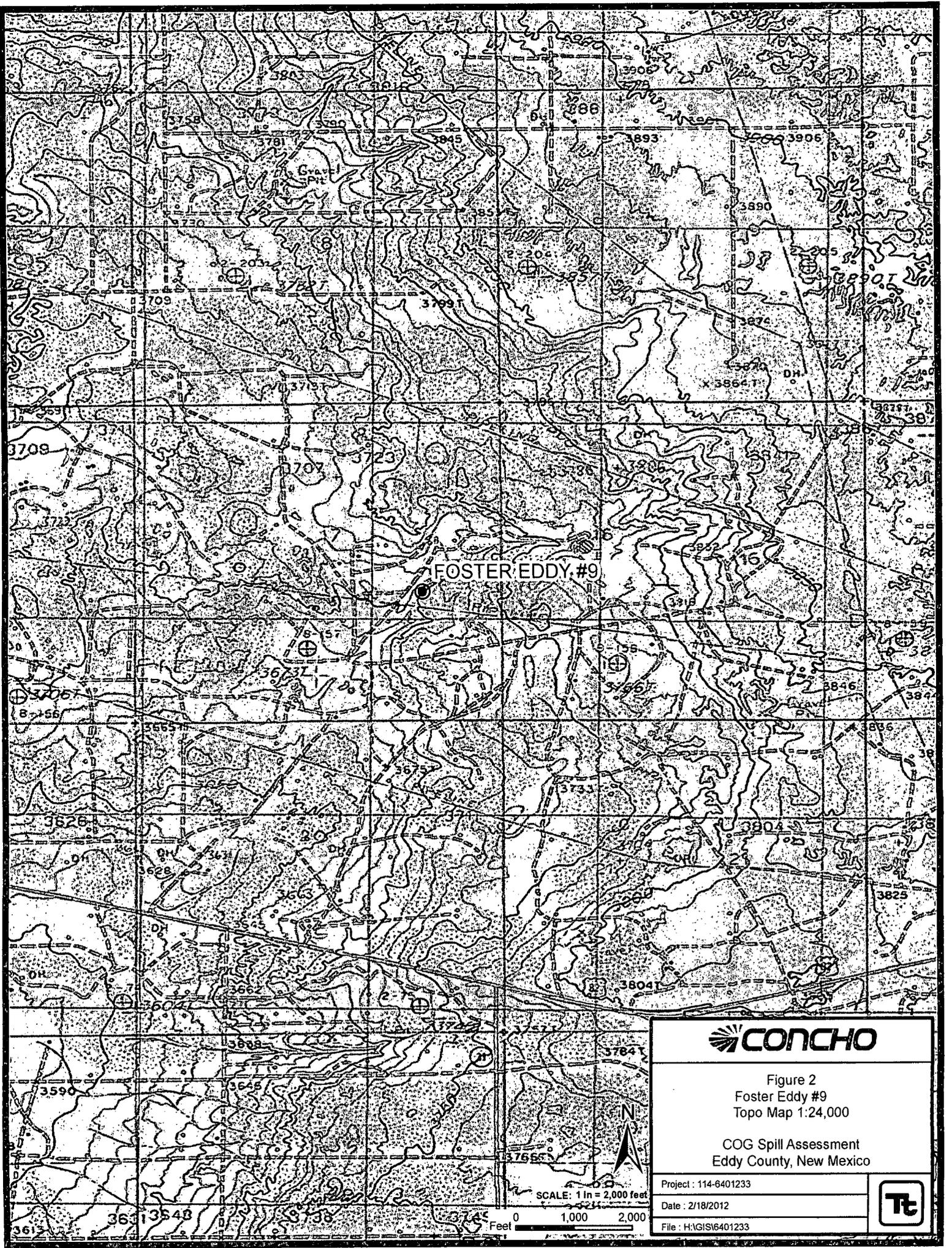
Project : 114-6401233

Date : 2/18/2012

File : H:\GIS\6401233



SCALE: 1 in = 12,500 feet
0 5,000 10,000
Feet



FOSTER EDDY #9



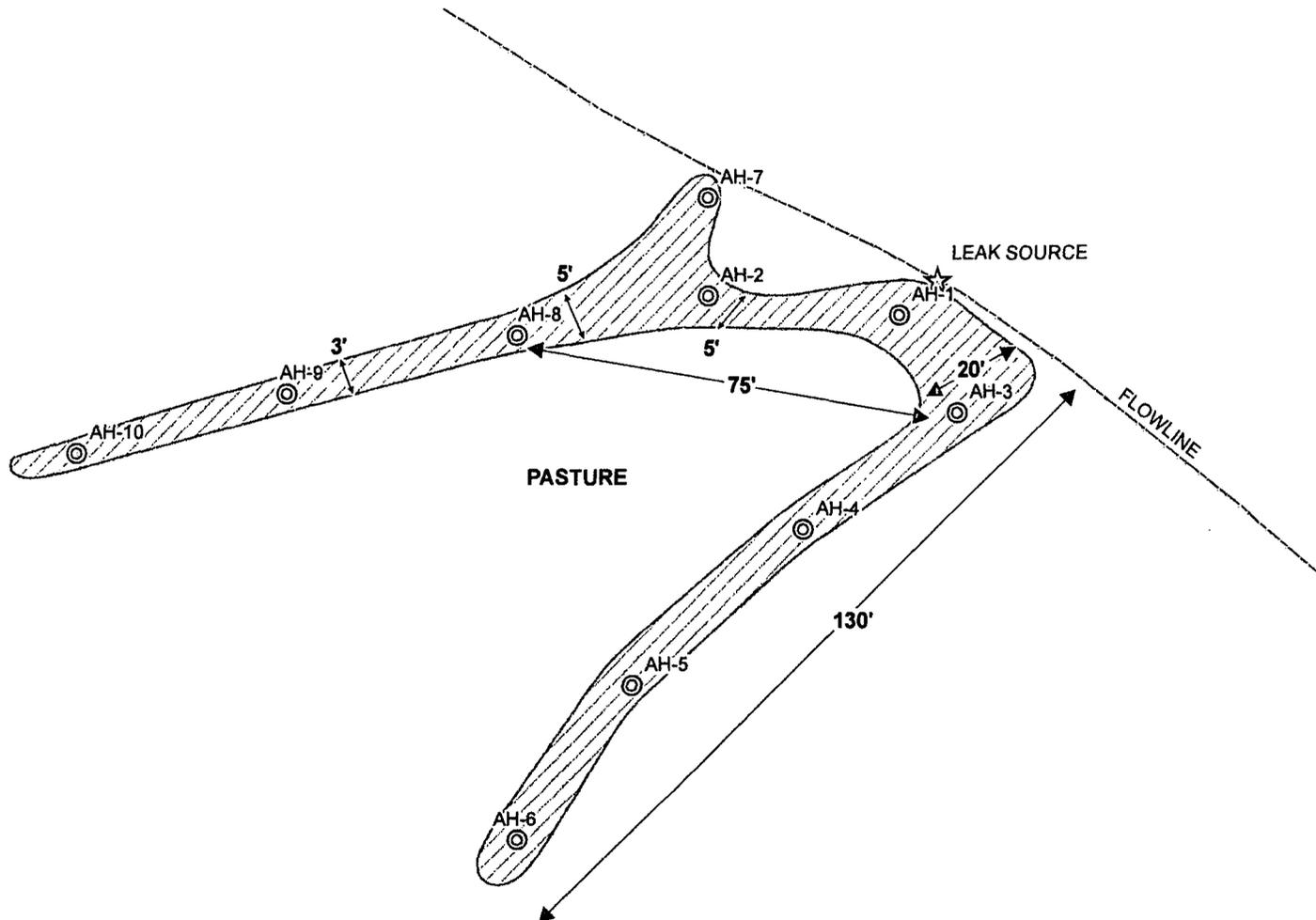
Figure 2
Foster Eddy #9
Topo Map 1:24,000

COG Spill Assessment
Eddy County, New Mexico

Project : 114-6401233
Date : 2/18/2012
File : H:\GIS\6401233

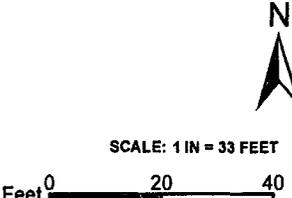


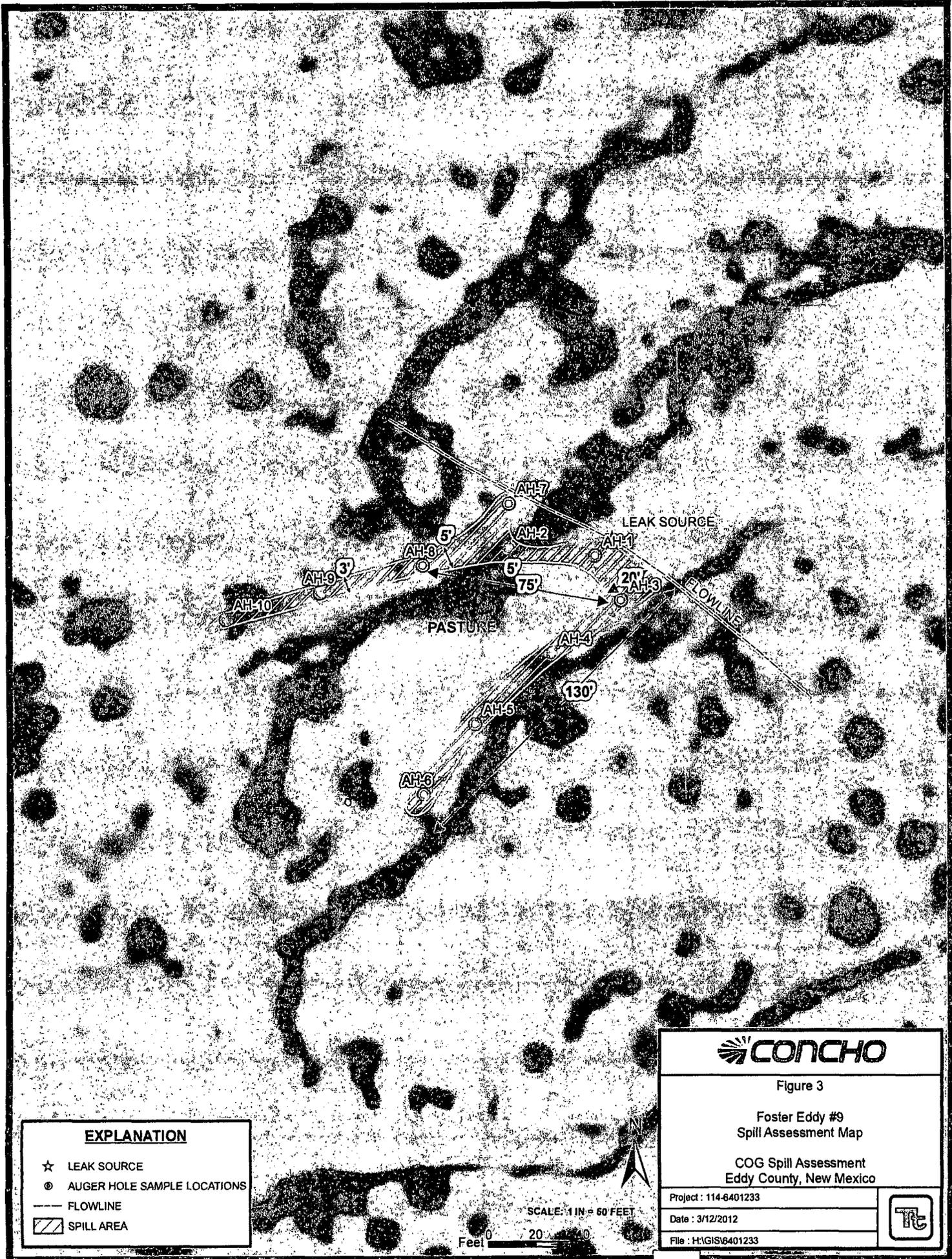
SCALE: 1 in = 2,000 feet
0 1,000 2,000 Feet



| EXPLANATION | |
|-------------|-----------------------------|
| ☆ | LEAK SOURCE |
| ⊙ | AUGER HOLE SAMPLE LOCATIONS |
| --- | FLOWLINE |
| ▨ | SPILL AREA |

| | |
|---|--|
| | |
| Figure 3 | |
| Foster Eddy #9 Spill Assessment Map | |
| COG Spill Assessment Eddy County, New Mexico | |
| Project : 114-6401233 | |
| Date : 3/12/2012 | |
| File : H:\GIS\6401233 | |





EXPLANATION

- ☆ LEAK SOURCE
- ⊙ AUGER HOLE SAMPLE LOCATIONS
- FLOWLINE
- ▨ SPILL AREA

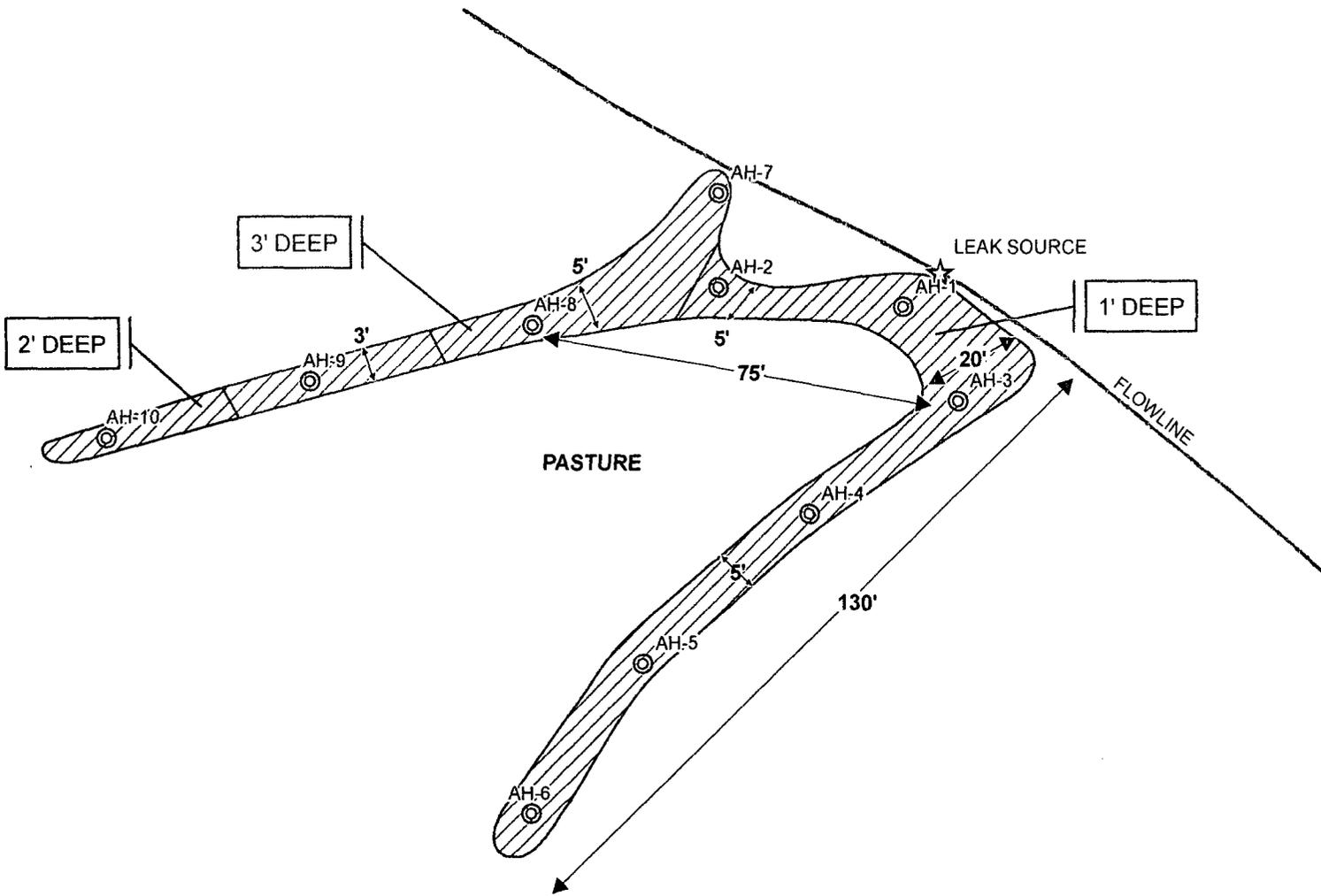
CONCHO

Figure 3

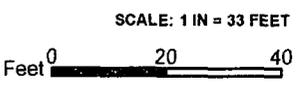
Foster Eddy #9
Spill Assessment Map

COG Spill Assessment
Eddy County, New Mexico

| | |
|-----------------------|--|
| Project : 114-6401233 | |
| Date : 3/12/2012 | |
| File : H:\GIS\6401233 | |



| EXPLANATION | |
|-------------|-----------------------------|
| ☆ | LEAK SOURCE |
| ⊙ | AUGER HOLE SAMPLE LOCATIONS |
| — | FLOWLINE |
| ▨ | PROPOSED EXCAVATION AREA |



| | |
|--|--|
| | |
| Figure 4 | |
| Foster Eddy #9 Proposed Excavation Areas & Depths Map | |
| COG Spill Assessment Eddy County, New Mexico | |
| Project : 114-6401233 | |
| Date : 3/12/2012 | |
| File : H:\GIS\6401233 | |

Tables

Table 1
COG Operating LLC.
Foster Eddy #9
Eddy County, New Mexico

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status | | TPH (mg/kg) | | | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------|-------------|-------------------|-------------|---------|-------------|------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
| | | | In-Situ | Removed | GRO | DRO | Total | | | | | | |
| AH-1 | 2/8/2012 | 0-1 | X | | <2.00 | 132 | 132 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 4,450 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 2-2.5 | X | | - | - | - | - | - | - | - | - | 328 |
| | " | 3-3.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 4-4.5 | X | | - | - | - | - | - | - | - | - | 671 |
| | " | 5-5.5 | X | | - | - | - | - | - | - | - | - | <200 |
| AH-2 | 2/8/2012 | 0-1 | X | | 4.20 | 98.7 | 103 | - | - | - | - | - | 2,060 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 2-2.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 3-3.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 4-4.5 | X | | - | - | - | - | - | - | - | - | <200 |
| AH-3 | 2/8/2012 | 0-1 | X | | 10.1 | 104 | 114 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 9,220 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | 1,260 |
| | " | 2-2.5 | X | | - | - | - | - | - | - | - | - | 413 |
| | " | 3-3.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 4-4.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 5-5.5 | X | | - | - | - | - | - | - | - | - | 372 |
| | " | 6-6.5 | X | | - | - | - | - | - | - | - | - | 815 |
| | " | 7-7.5 | X | | - | - | - | - | - | - | - | - | 627 |
| | " | 8-8.5 | X | | - | - | - | - | - | - | - | - | 790 |
| | " | 9-9.5 | X | | - | - | - | - | - | - | - | - | 926 |

Table 1
COG Operating LLC.
Foster Eddy #9
Eddy County, New Mexico

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status | | TPH (mg/kg) | | | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------|-------------|-------------------|-------------|---------|-------------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
| | | | In-Situ | Removed | GRO | DRO | Total | | | | | | |
| AH-4 | 2/8/2012 | 0-1 | X | | 14.9 | 407 | 422 | <0.100 | <0.100 | <0.100 | 0.251 | 0.251 | 4,980 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 2-2.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 3-3.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 4-4.5 | X | | - | - | - | - | - | - | - | - | <200 |
| AH-5 | 2/8/2012 | 0-1 | X | | <2.00 | <50.0 | <50.0 | - | - | - | - | - | 2,440 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | 350 |
| AH-6 | 2/8/2012 | 0-1 | X | | <2.00 | <50.0 | <50.0 | - | - | - | - | - | 2,890 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | <200 |
| AH-7 | 2/8/2012 | 0-1 | X | | 263 | 1,720 | 1,983 | <0.200 | <0.200 | 2.04 | 4.08 | 6.12 | 7,060 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | 11,300 |
| | " | 2-2.5 | X | | - | - | - | - | - | - | - | - | 3,460 |
| AH-8 | 2/8/2012 | 0-1 | X | | <2.00 | 117 | 117 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 7,550 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | 11,600 |

**Table 1
COG Operating LLC.
Foster Eddy #9
Eddy County, New Mexico**

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status | | TPH (mg/kg) | | | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------|-------------|-------------------|-------------|---------|-------------|-------|--------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
| | | | In-Situ | Removed | GRO | DRO | Total | | | | | | |
| AH-9 | 2/8/2012 | 0-1 | X | | <2.00 | 108 | 108 | - | - | - | - | - | 5,910 |
| | " | 1-1.5 | X | | - | - | - | - | - | - | - | - | 6,030 |
| | " | 2-2.5 | X | | - | - | - | - | - | - | - | - | 3,730 |
| | " | 3-3.5 | X | | - | - | - | - | - | - | - | - | 1,540 |
| | " | 4-4.5 | X | | - | - | - | - | - | - | - | - | 2,230 |
| | " | 5-5.5 | X | | - | - | - | - | - | - | - | - | 2,730 |
| | " | 6-6.5 | X | | - | - | - | - | - | - | - | - | 1,830 |
| | " | 7-7.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 8-8.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 9-9.5 | X | | - | - | - | - | - | - | - | - | <200 |
| AH-10 | 2/8/2012 | 0-1 | X | | 4,050 | 8,750 | 12,800 | 23.0 | 152 | 115 | 137 | 427 | 4,940 |
| | " | 1-1.5 | X | | 1,500 | 2,780 | 4,280 | 12.4 | 66.4 | 45.8 | 54.2 | 179 | 4,090 |
| | " | 2-2.5 | X | | - | - | - | 0.642 | 14.7 | 20.5 | 27.0 | 62.8 | 1,390 |
| | " | 3-3.5 | X | | - | - | - | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <0.0200 | <200 |
| | " | 4-4.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 5-5.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 6-6.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 7-7.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 8-8.5 | X | | - | - | - | - | - | - | - | - | <200 |
| | " | 9-9.5 | X | | - | - | - | - | - | - | - | - | <200 |

(-) Not Analyzed

 Proposed Excavation Depth

Photos

COG Operating LLC
Foster Eddy #9
Eddy County, New Mexico
Drilling Date: February 8, 2012



TETRA TECH



View north east near source and AH-1



View south west along arroyo/wash near AH-4

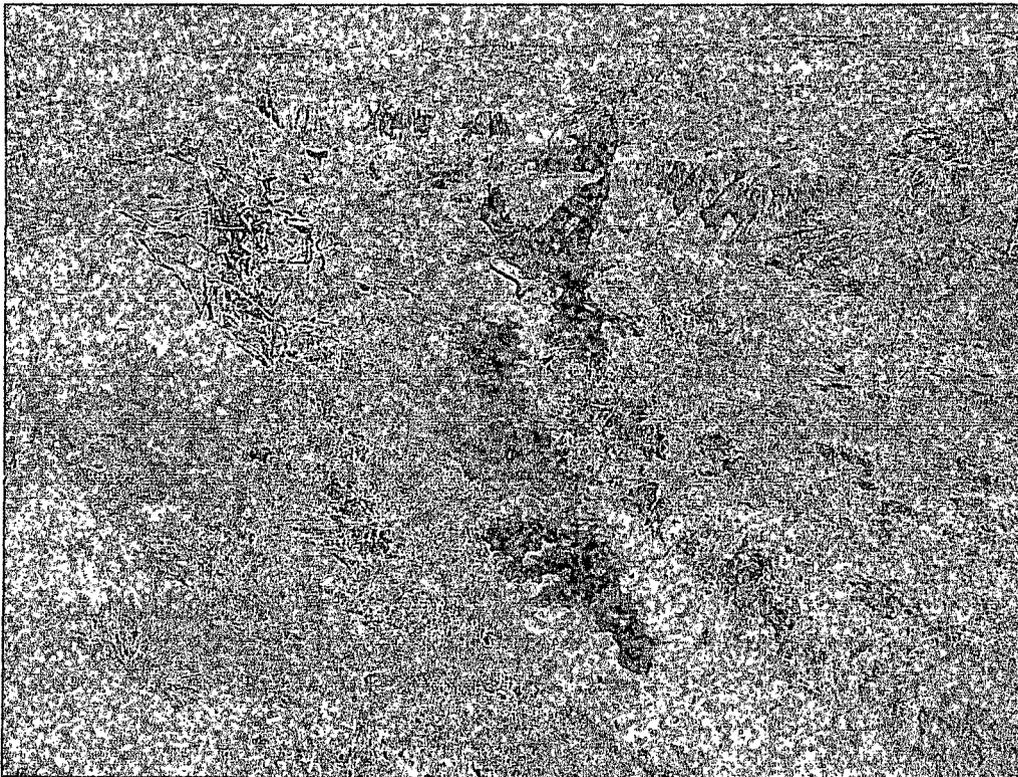
COG Operating LLC
Foster Eddy #9
Eddy County, New Mexico
Drilling Date: February 8, 2012



TETRA
TECH

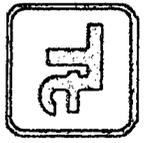


View of arroyo/wash

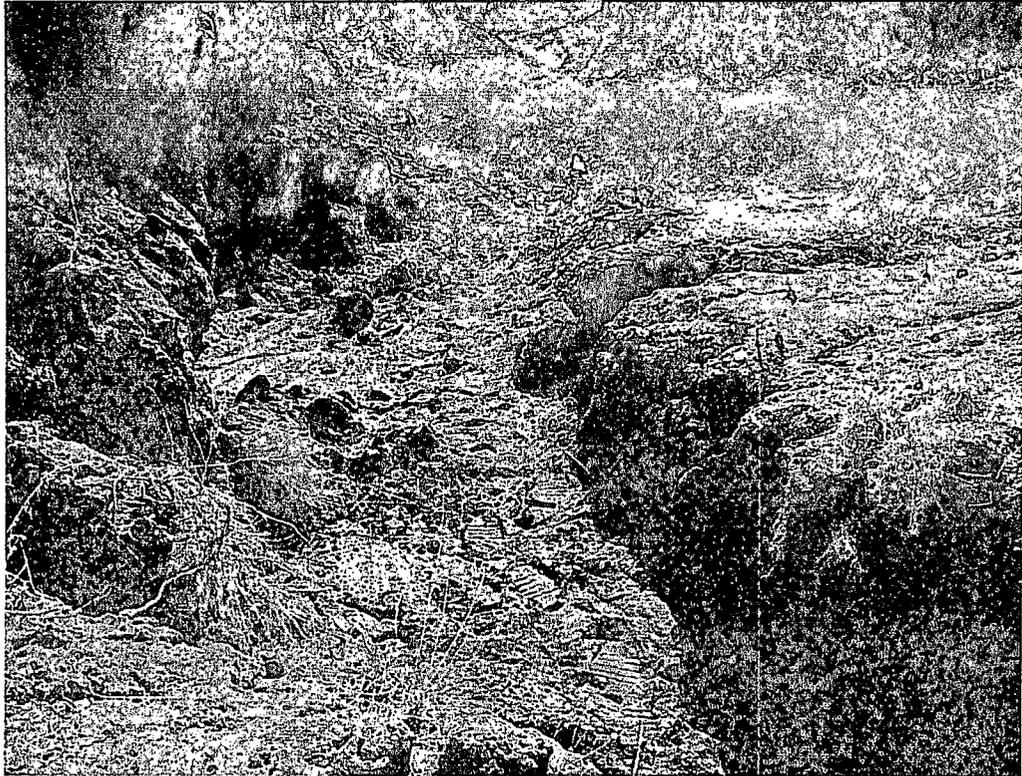


View north east – edge of spill path near AH-10

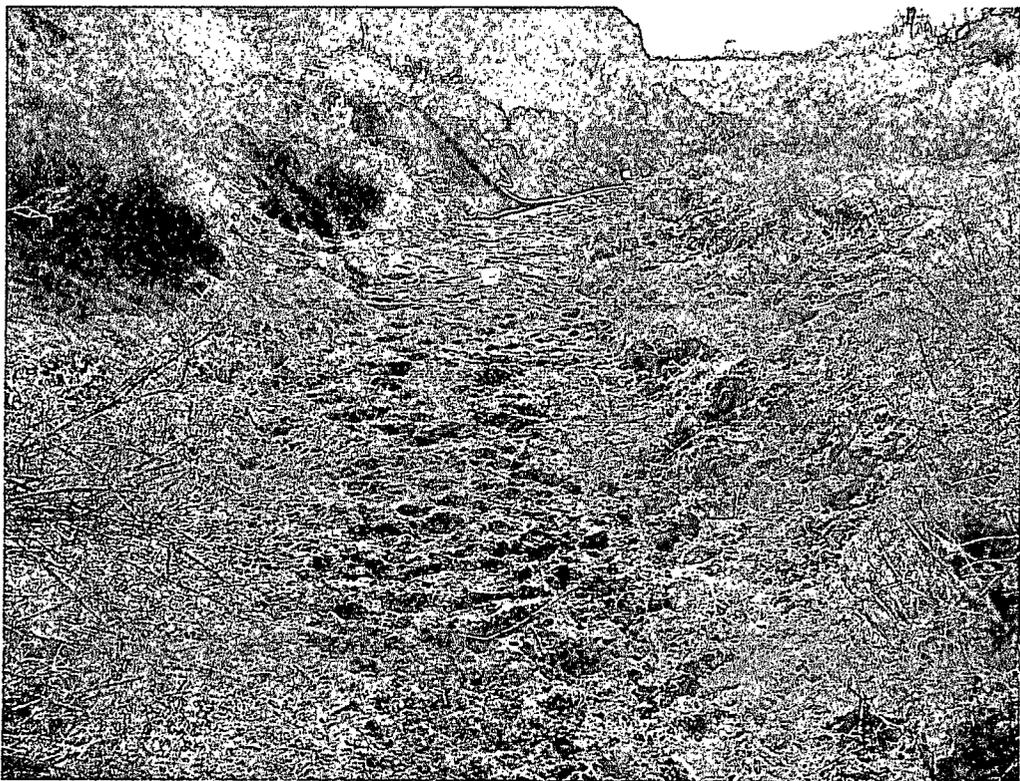
COG Operating LLC
Foster Eddy #9
Eddy County, New Mexico
Drilling Date: February 8, 2012



TETRA TECH



View of arroyo/wash



View of arroyo/wash

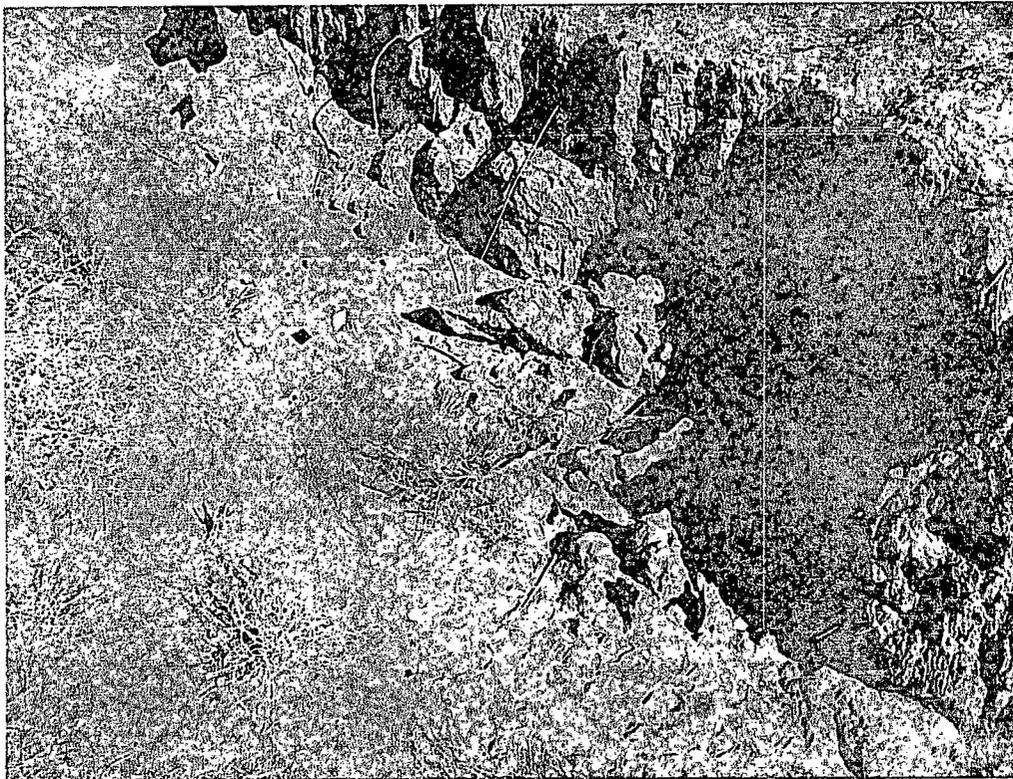
COG Operating LLC
Foster Eddy #9
Eddy County, New Mexico
Drilling Date: February 8, 2012



TETRA TECH



View of arroyo/wash

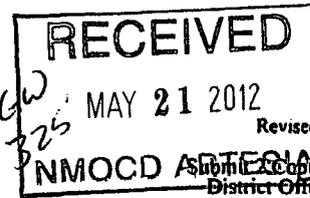


View of Arroyo/Wash

Appendix A

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505



Form C-141
Revised October 10, 2003
Submit 3 copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

| | | | |
|-----------------|--|---------------|--------------|
| Name of Company | COG OPERATING LLC | Contact | Pat Ellis |
| Address | 550 W. Texas, Suite 100, Midland, TX 79701 | Telephone No. | 432-230-0077 |
| Facility Name | Foster Eddy #9 | Facility Type | Flowline |

| | | | | | |
|---------------|---------|---------------|--|------------------|--------------|
| Surface Owner | Federal | Mineral Owner | | Lease No. (API#) | 30-015-26273 |
|---------------|---------|---------------|--|------------------|--------------|

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|---------|----------|-------|---------------|------------------|---------------|----------------|--------|
| Unit Letter | Section | Township | Range | Feet from the | North/South Line | Feet from the | East/West Line | County |
| J | 17 | 17S | 31E | | | | | Eddy |

Latitude 32 49.990 Longitude 103 53.261

NATURE OF RELEASE

| | | | | | |
|-----------------------------|--|---|-----------------------|----------------------------|-----------------------|
| Type of Release | Produced water Skim oil | Volume of Release | 15bbls pw 1bbl oil | Volume Recovered | none recovered |
| Source of Release | 3" poly line ruptured | Date and Hour of Occurrence | 01:13:2012 | Date and Hour of Discovery | 01:13:2012 12:00 p.m. |
| Was Immediate Notice Given? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | | | |
| By Whom? | | Date and Hour | | | |
| Was a Watercourse Reached? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | | | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A 3" poly line ruptured. The line has been repaired and returned to service.

Describe Area Affected and Cleanup Action Taken.*

Initially 16bbls of produced fluid was released from the ruptured poly line and due to the nature of the release we were unable to recover any fluid. The fluid travels along two paths measuring 4' x 60' and 4' x 15'. The fluid took the path of least resistance and streamed into low lying areas and pathways. Tetra Tech will sample the spill areas to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for approval prior to any significant remediation work.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

| | | | |
|-----------------|----------------------------|-----------------------------------|------------------|
| Signature: | | OIL CONSERVATION DIVISION | |
| Printed Name: | Josh Russo | Approved by District Supervisor: | |
| Title: | HSE Coordinator | Approval Date: | Expiration Date: |
| E-mail Address: | jrusso@conchoresources.com | Conditions of Approval: | |
| Date: | 01/27/2012 | Phone: | 432-212-2399 |
| | | Attached <input type="checkbox"/> | |

* Attach Additional Sheets If Necessary

Appendix B

Appendix C

Summary Report

Ike Tavarez
Tetra Tech
1910 N. Big Spring Street
Midland, TX 79705

Report Date: February 22, 2012

Work Order: 12021022

Project Location: Eddy Co., NM
Project Name: COG/Foster Eddy #9
Project Number: 114-6401233

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|--------------|--------|------------|------------|---------------|
| 288783 | AH-1 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288784 | AH-1 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288785 | AH-1 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288786 | AH-1 3-3.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288787 | AH-1 4-4.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288788 | AH-1 5-5.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288789 | AH-2 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288790 | AH-2 1.-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288791 | AH-2 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288792 | AH-2 3-3.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288793 | AH-2 4-4.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288794 | AH-3 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288795 | AH-3 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288796 | AH-3 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288797 | AH-3 3-3.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288798 | AH-3 4-4.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288799 | AH-3 5-5.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288800 | AH-3 6-6.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288801 | AH-3 7-7.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288802 | AH-3 8-8.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288803 | AH-3 9-9.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288804 | AH-4 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288805 | AH-4 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288806 | AH-4 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288807 | AH-4 3-3.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288808 | AH-4 4-4.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288809 | AH-5 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288810 | AH-5 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288811 | AH-6 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288812 | AH-6 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|--------------|--------|------------|------------|---------------|
| 288813 | AH-7 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288814 | AH-7 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288815 | AH-7 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288816 | AH-8 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288817 | AH-8 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288818 | AH-9 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288819 | AH-9 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288820 | AH-9 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288821 | AH-9 3-3.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288822 | AH-9 4-4.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288823 | AH-9 5-5.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288824 | AH-9 6-6.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288825 | AH-9 7-7.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288826 | AH-9 8-8.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288827 | AH-9 9-9.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288828 | AH-10 0-1' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288829 | AH-10 1-1.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288830 | AH-10 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288831 | AH-10 3-3.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288832 | AH-10 4-4.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288833 | AH-10 5-5.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288834 | AH-10 6-6.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288835 | AH-10 7-7.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288836 | AH-10 8-8.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288837 | AH-10 9-9.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |
| 288872 | AH-5 2-2.5' | soil | 2012-02-08 | 00:00 | 2012-02-10 |

| Sample - Field Code | BTEX | | | | TPH DRO - NEW | TPH GRO |
|-----------------------|--------------------|--------------------|-------------------------|-------------------|----------------|----------------|
| | Benzene (mg/Kg) | Toluene (mg/Kg) | Ethylbenzene (mg/Kg) | Xylene (mg/Kg) | DRO (mg/Kg) | GRO (mg/Kg) |
| 288783 - AH-1 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 132 | <2.00 |
| 288789 - AH-2 0-1' | | | | | 98.7 | 4.20 |
| 288794 - AH-3 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 104 Qs | 10.1 |
| 288804 - AH-4 0-1' | <0.100 | <0.100 | <0.100 | 0.251 | 407 Qs | 14.9 |
| 288809 - AH-5 0-1' | | | | | <50.0 | <2.00 |
| 288811 - AH-6 0-1' | | | | | <50.0 | <2.00 |
| 288813 - AH-7 0-1' | <0.200 | <0.200 | 2.04 | 4.08 | 1720 | 263 |
| 288816 - AH-8 0-1' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | 117 Qs | <2.00 |
| 288818 - AH-9 0-1' | | | | | 108 Qs | <2.00 |
| 288828 - AH-10 0-1' | 23.0 | 152 | 115 | 137 | 8750 | 4050 |
| 288829 - AH-10 1-1.5' | 12.4 | 66.4 Jc | 45.8 Jc | 54.2 | 2780 Qs | 1500 |
| 288830 - AH-10 2-2.5' | 0.642 | 14.7 | 20.5 | 27.0 | | |
| 288831 - AH-10 3-3.5' | <0.0200 | <0.0200 | <0.0200 | <0.0200 | | |

Sample: 288783 - AH-1 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 4450 | mg/Kg | 4 |

Sample: 288784 - AH-1 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288785 - AH-1 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 328 | mg/Kg | 4 |

Sample: 288786 - AH-1 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288787 - AH-1 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 671 | mg/Kg | 4 |

Sample: 288788 - AH-1 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288789 - AH-2 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2060 | mg/Kg | 4 |

Sample: 288790 - AH-2 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288791 - AH-2 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288792 - AH-2 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288793 - AH-2 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288794 - AH-3 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 9220 | mg/Kg | 4 |

Sample: 288795 - AH-3 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1260 | mg/Kg | 4 |

Sample: 288796 - AH-3 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 413 | mg/Kg | 4 |

Sample: 288797 - AH-3 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288798 - AH-3 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288799 - AH-3 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 372 | mg/Kg | 4 |

Sample: 288800 - AH-3 6-6.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 815 | mg/Kg | 4 |

Sample: 288801 - AH-3 7-7.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 627 | mg/Kg | 4 |

Sample: 288802 - AH-3 8-8.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 790 | mg/Kg | 4 |

Sample: 288803 - AH-3 9-9.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 926 | mg/Kg | 4 |

Sample: 288804 - AH-4 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 4980 | mg/Kg | 4 |

Sample: 288805 - AH-4 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288806 - AH-4 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288807 - AH-4 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288808 - AH-4 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288809 - AH-5 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2440 | mg/Kg | 4 |

Sample: 288810 - AH-5 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 350 | mg/Kg | 4 |

Sample: 288811 - AH-6 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2890 | mg/Kg | 4 |

Sample: 288812 - AH-6 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288813 - AH-7 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 7060 | mg/Kg | 4 |

Sample: 288814 - AH-7 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 11300 | mg/Kg | 4 |

Sample: 288815 - AH-7 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 3460 | mg/Kg | 4 |

Sample: 288816 - AH-8 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 7550 | mg/Kg | 4 |

Sample: 288817 - AH-8 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 11600 | mg/Kg | 4 |

Sample: 288818 - AH-9 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 5910 | mg/Kg | 4 |

Sample: 288819 - AH-9 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 6030 | mg/Kg | 4 |

Sample: 288820 - AH-9 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 3730 | mg/Kg | 4 |

Sample: 288821 - AH-9 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1540 | mg/Kg | 4 |

Sample: 288822 - AH-9 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2230 | mg/Kg | 4 |

Sample: 288823 - AH-9 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 2730 | mg/Kg | 4 |

Sample: 288824 - AH-9 6-6.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1830 | mg/Kg | 4 |

Sample: 288825 - AH-9 7-7.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288826 - AH-9 8-8.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288827 - AH-9 9-9.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288828 - AH-10 0-1'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 4940 | mg/Kg | 4 |

Sample: 288829 - AH-10 1-1.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 4090 | mg/Kg | 4 |

Sample: 288830 - AH-10 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | 1390 | mg/Kg | 4 |

Sample: 288831 - AH-10 3-3.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288832 - AH-10 4-4.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288833 - AH-10 5-5.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288834 - AH-10 6-6.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288835 - AH-10 7-7.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288836 - AH-10 8-8.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288837 - AH-10 9-9.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |

Sample: 288872 - AH-5 2-2.5'

| Param | Flag | Result | Units | RL |
|----------|------|--------|-------|----|
| Chloride | | <200 | mg/Kg | 4 |